

## CASE REPORT

Anesthesia of Face Uncovered by Histopathology<sup>1</sup>Ebenezer Daniel and Gigi Ebenezer<sup>2</sup>

Leprosy is a chronic granulomatous disease characterized by hypopigmented and anesthetic skin lesions. Visible lesions occurring over the face, especially those situated over the malar region or over the eyelids, are known to be associated with lagophthalmos<sup>(3)</sup>. Although the face has a rich sensory nerve supply, it has been shown that areas of anesthesia can exist in the face in leprosy patients<sup>(1,4)</sup>. Patients are often unaware of injuries that occur over these anesthetic areas. We report on one such patient who sustained an injury over the left upper eyelid and three years later the skin taken from that region during surgery for entropion disclosed histopathologically, a foreign body granuloma.

## CASE REPORT

A 53-yr-old female presented with severe itching of the left eye due to a flaccid entropion and trichiasis. Skin and muscle excision over the left upper eyelid with deep sutures to correct the entropion was done and the excised skin sent for routine histopathological examination. The patient was diagnosed as having lepromatous leprosy 35 yrs ago. Her initial skin smears, done in 1965 for acid-fast bacilli (AFB) had an average bacterial index of 1.80+. She was treated with Dapsone monotherapy for 17 yrs followed by the Multidrug

Therapy (MDT) recommended by the World Health Organization (WHO) for two years. From 1979 onwards her skin smears, done every year, had been negative for AFB.

On examination, there was a glove and stocking anesthesia, both ulnar nerves were enlarged, and collapsed nose was present. The 5th toe of the right foot was lost. The right eye had a best corrected visual acuity of 6/24, madarosis, flaccid entropion, trichiasis, decreased corneal sensation, old keratic precipitates, non-reacting pupil, iris atrophy, and cataract. The left eye had a visual acuity of counting fingers at 1 meter, mild lagophthalmos, which on gentle closure of the lids did not expose the cornea, flaccid entropion, trichiasis, decreased corneal sensation, and vascularized corneal opacity.

Histopathology of the skin from the eyelid displayed granulomas composed of foreign body giant cells and histiocytes in the stroma (Fig. 1). When a polarizer was used to view the field, polarizing foreign particles were seen (Fig. 2). Acid-fast staining did not reveal any AFB. The patient had not volunteered any history of injury, but on questioning whether any injury had occurred, said that a piece of sugar cane had lodged in her upper lid when she was cutting it three years ago. There was no pain and the open lesion had healed. Sensation over the face was checked using three grades of Semmes Weinstein monofilaments<sup>(2)</sup> and disclosed large areas of anesthesia over the face including the lids of both eyes.

## COMMENT

Detection of the foreign body granuloma by histopathology was accidental. It is likely that the fiber-like foreign bodies engulfed by the giant cells are the sugarcane fibers that had lodged in the upper eyelid

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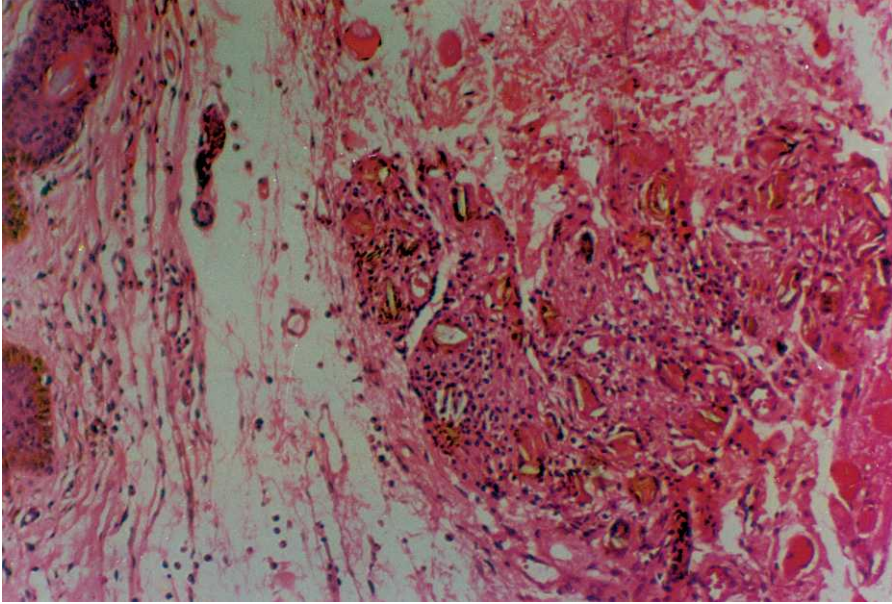


FIG. 1. Photomicrograph showing granulomas composed of foreign body giant cells and histiocytes in the stroma of eyelid skin. (H&E,  $\times 200$ .)

three years ago. The significant aspect of the injury was that a considerable period of time had passed without the patient attaching any undue importance to it, but was highlighted because of the incidental histopathological finding and retrospective questioning.

Sensory loss over the limbs can lead to destruction of the extremities and this has led to the establishment of numerous prevention of disability (POD) programs in places where leprosy is still endemic. These programs hardly ever take into account or evaluate loss of sensation over the face.

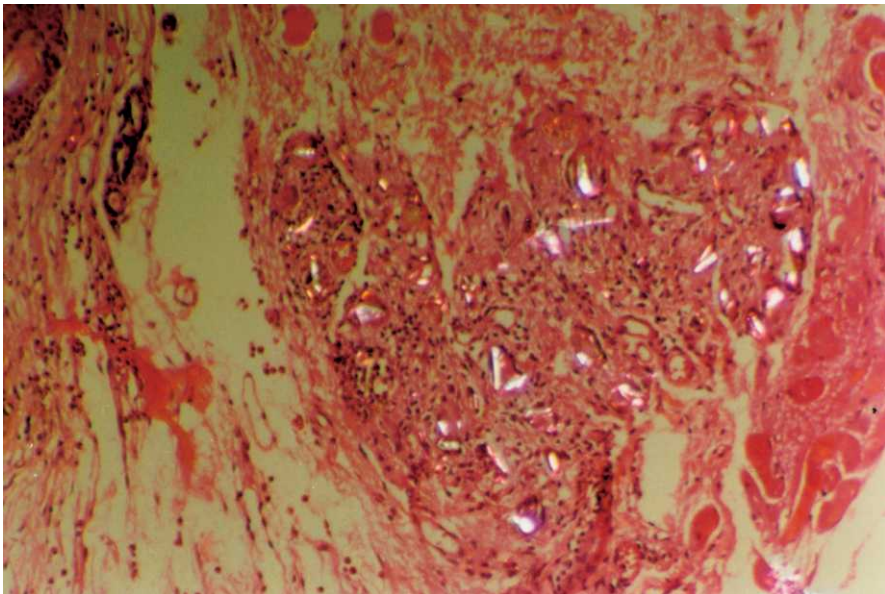


FIG. 2. Polarized photomicrograph showing foreign bodies in the stroma. (H&E,  $\times 200$ .)

This report emphasizes the fact that sensory loss over the face could also result in injuries that go unnoticed and uncared for by the patient. In this case, the injury was trivial but if the injury had occurred on an insensitive cornea, a fungal corneal ulcer destroying the eye would not only have been a possibility but, had it occurred, could have led to blindness and added to the suffering of a group of people already overwhelmingly disadvantaged.

### REFERENCES

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